

# SMD Schottky Barrier Diode



## CDBF0520 (Lead-free Device)

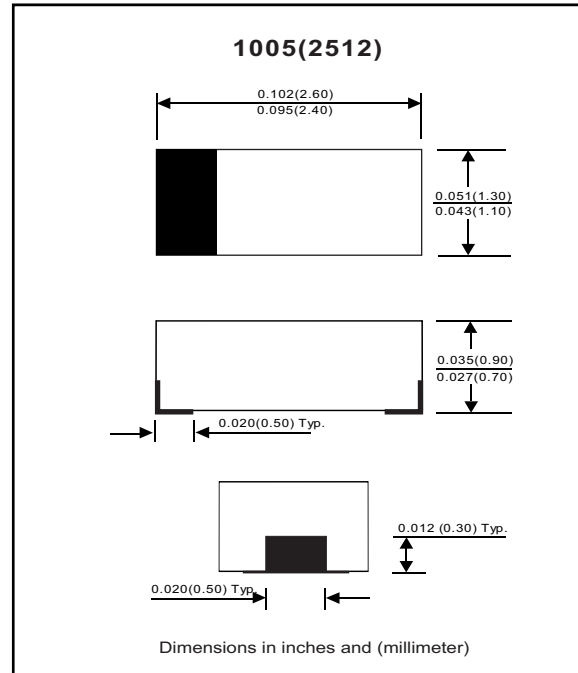
$I_o = 500 \text{ mA}$   
 $V_R = 20 \text{ Volts}$   
**Features**



- Low forward Voltage
- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Majority carrier conduction.

### Mechanical data

- Case: SOD-323F (2512) Standard package , molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.006 gram (approximately).



### Maximum Rating ( at $T_A = 25^\circ \text{C}$ unless otherwise noted )

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		$V_{RM}$			30	V
Reverse voltage		$V_R$			20	V
Average forward rectified current		$I_o$			0.5	A
Forward current , surge peak	8.3 ms single half sine-wave superimposed on rate load ( JEDEC method )	$I_{FSM}$			2	A
Storage temperature		$T_{STG}$	-40		+125	$^\circ\text{C}$
Junction temperature		$T_j$	-40		+125	$^\circ\text{C}$

### Electrical Characteristics ( at $T_A = 25^\circ\text{C}$ unless otherwise noted )

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100\text{mA}$ $I_F = 500\text{mA}$	$V_F$ $V_F$			0.36 0.47	V V
Reverse current	$V_R = 20\text{V}$	$I_R$			100	$\mu\text{A}$
Capacitance between terminals	$f = 1\text{MHz}$ , and 0 VDC reverse voltage	$C_T$		100		pF

## RATING AND CHARACTERISTIC CURVES (CDBF0520)

Fig. 1 - Forward characteristics

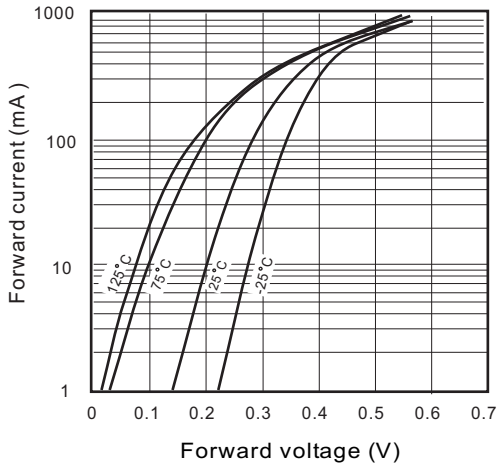


Fig. 2 - Reverse characteristics

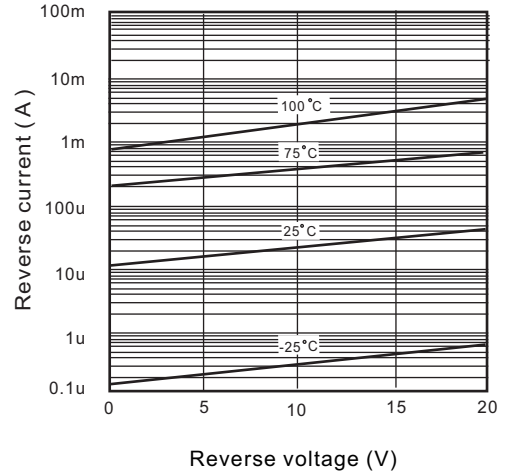


Fig. 3 - Capacitance between terminals characteristics

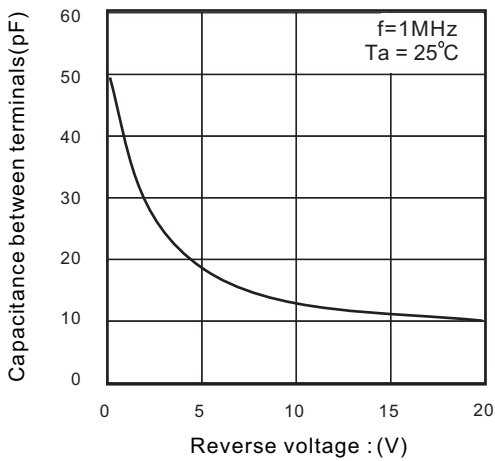


Fig. 4 - Current derating curve

